

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the above-captioned patent application:

Listing of Claims:

1. (Currently Amended) A controllable piston valve for a shock absorber having a piston cylinder structure, the piston valve comprising ~~the following features:~~
[[-]] a first piston valve member ~~(22, 22a)~~ which controls a throughflow area; ~~is actuated by~~ a control piston ~~(32)~~ defined as a differential piston which that includes oppositely directed effective surfaces subject to the pressure of a piston and an annular chamber ~~(14, 12)~~ respectively, of the piston cylinder structure,
[[-]] wherein the control piston ~~(32)~~ and/or the valve member is additionally loaded with the pressure P_a of a pressure source opposite to the larger ~~(34)~~ of the effective surfaces, the pressure source being formed of a combination of a fluidic resistance R_{ha} and a fluidic capacitance (44) and is supplied by the pressure in the piston or annular chamber ~~(14, 12)~~ respectively, of the piston cylinder structure.

2. (Currently Amended) A controllable piston valve for a shock absorber having a piston cylinder structure, the piston valve comprising ~~the following features:~~
[[-]] ~~two~~ a first and a second piston valve ~~members (84, 86)~~ member, each valve member controlling a throughflow area and each being actuatable by two control piston portions, wherein effective surfaces of the control piston portions of the first piston valve member are connected to the piston and the annular chamber of the piston cylinder structure and effective surfaces of the control piston portions of the second piston valve member are connected with the piston chamber or a pressure source, the pressure source being formed by the combination of a fluidic resistance R_{ha} and a fluidic capacitance which is supplied by the pressure of the piston or the annular chamber (14, 12) respectively of the piston cylinder structure.

~~[[-]] effective surfaces of the control piston portions of the first piston valve member are connected to the piston and the annular chamber of the piston cylinder structure and~~

~~[[-]] effective surfaces of the control piston portions of the second piston valve member are connected with the piston chamber or a pressure source, the pressure source being formed by the combination of a fluidic resistance R_{ha} and a fluidic capacitance which is supplied by the pressure of the piston or the annular chamber (14, 12) respectively of the piston cylinder structure.~~

3. (Currently Amended) The piston valve of claim 1, wherein a second piston valve member is located parallel to the first piston valve member which is also actuated by a control piston being a differential piston, the opposite effective surfaces thereof being subject to the pressure of the piston chamber and the annular chamber of the piston cylinder structure.

4. (Currently Amended) The piston valve of claim 1, wherein it said valve is formed as a two-way-valve having an integral piston valve spool (22) with two control surfaces or edges (28, 30) respectively, the valve spool (22) being actuated by the control piston (32) and the pressure P_a of the balancing pressure source.

5. (Currently Amended) A controllable bottom valve for a shock absorber having a piston cylinder structure or a plunger cylinder structure with a storage volume, respectively, the bottom valve having the following features comprising:

~~[[-]] a first bottom valve member (60, 60a) which controls a throughflow area and is actuated by a control piston defined by a differential piston,~~

~~[[-]] the control piston ~~has~~ having a first effective surface (72, 72a) which is subject to the pressure in the piston or plunger chamber (54) of the piston or plunger cylinder structure,~~

[[-]] the differential piston ~~has~~ having a second effective surface (74, 74a) which is subject to the pressure of the storage volume (56), the effective surfaces being oppositely directed, and in which

[[-]] the pressure P_a of the pressure source acts on the bottom valve (~~60, 60a~~) or the control piston, respectively opposite to the effective surfaces, the pressure source including a combination of a fluidic resistance R_{ha} and a fluidic capacitance (~~80~~) and being supplied by the pressure of the piston chamber or the plunger chamber, respectively, or the pressure of the storage volume (~~56~~).

6. (Currently Amended) The bottom valve of claim 5, wherein a second bottom valve member is arranged parallel to the first bottom valve member (~~60a~~), the second valve member is being actuated by a differential piston having effective surfaces facing in the same direction and being subject to the pressure of the piston or plunger chamber, respectively, and the storage volume.

7. (Currently Amended) The bottom valve of claim 5, wherein it is formed as a two-way-valve having an integral valve spool (~~60~~) with two control surfaces or edges, respectively (~~62, 64~~), the valve spool (~~60~~) being actuated by the control piston or the pressure source.

8. (Currently Amended) The valve of ~~claims 1 to 7~~ claim 1, wherein the effective area of the fluidic resistance is variable.

9. (Original) The valve of claim 8, wherein the flow area is changed in dependence of the compression or pulling performance of the shock absorber.

10. (Original) The valve of claim 8, wherein the flow area is changed in dependence of the steering angle and/or the actuation of a brake pedal of a vehicle.

11. (Currently Amended) The bottom valve of ~~claims 1 to 10~~ claim 1, wherein the fluidic resistance includes a solenoid valve (~~94, 92~~).

12. (Currently Amended) The valve of claim 11, wherein the solenoid valve ~~(92, 94)~~ is connected in parallel to an orifice R_{ha} of constant area.

13. (Currently Amended) A valve of claim 5, ~~characterized by its application~~ said valve being applied to a two-tube shock absorber.

14. (Currently Amended) The valve of claim 1 ~~or 5~~, wherein the piston valve spool is displaceably supported in an absorber piston ~~(110)~~ and held in a neutral position by a spring arrangement ~~(150)~~, and a passage ~~(136)~~ through a valve spool ~~(118)~~ with a restriction ~~(138)~~ forms the fluidic resistance which is in communication with a storage volume ~~(148)~~ in piston rod ~~(112)~~.

15. (Currently Amended) Controllable piston valve of ~~one of the claims 1 to 14~~ claim 1, wherein control piston and piston valve ~~(22b)~~ are formed at an integrally formed piston arrangement which is located in a bore of same diameter, a piston portion controlling a first throughflow area has a first effective surface ~~(34)~~, an oppositely directed second effective surface is formed at a piston portion ~~(33b)~~ which is loaded with pressure P_a of the pressure source ~~(44)~~, a valve chamber ~~(31b)~~ formed through an outer constriction of the valve spool is connected to the annular chamber ~~(14)~~ of the piston cylinder structure and is in communication with an inner bore ~~(202)~~ through at least one radial bore ~~(200)~~ in the piston arrangement, and a piston portion ~~(204)~~ extends into the inner bore which is fixedly attached to the bore and subject to the pressure of the pressure source ~~(44)~~.

16. (New) The valve of claim 5, wherein the piston valve spool is displaceably supported in an absorber piston and held in a neutral position by a spring arrangement, and a passage through a valve spool with a restriction forms the fluidic resistance which is in communication with a storage volume in piston rod.

17. (New) Controllable piston valve of claim 5, wherein control piston and piston valve are formed at an integrally formed piston arrangement which is located in a bore of same diameter, a piston portion controlling a first throughflow area has a first effective surface, an oppositely directed second effective surface is formed at a piston portion which is loaded with pressure P_a of the pressure source, a valve chamber formed through an outer constriction of the valve spool is connected to the annular chamber of the piston cylinder structure and is in communication with an inner bore through at least one radial bore in the piston arrangement, and a piston portion extends into the inner bore which is fixedly attached to the bore and subject to the pressure of the pressure source.